(19) World Intellectual Property Organization International Bureau

mational Bureau





(43) International Publication Date
15 January 2004 (15.01.2004)

PCT

(10) International Publication Number WO 2004/004908 A 1

(51) International Patent Classification⁷: 2/00, 7/12, 25/00

B02C 1/00,

(21) International Application Number:

PCT/F12003/000535

(22) International Filing Date:

2 July 2003 (02.07.2003)

(25) Filing Language:

Finnish

(26) Publication Language:

English

(30) Priority Data:

20021327

5 July 2002 (05.07.2002) FI

(71) Applicant (for all designated States except US): METSO MINERALS (TAMPERE) OY [FI/FI]; P.O. Box 306, FIN-33101 TAMPERE (FI).

(72) Inventors; and

(75) Inventors/Applicants (for US only): BARSCEVICIUS, Paulo [BR/BR]; Rua Artur Caldini, 317, Jardim Saira, 18085-050 SOROCABA - SP (BR). ALVES, Osmair, Nunes, [BR/BR]; Adolfo Frederico Schileiffer, 229, Vila Angélica, 18070-270 SOROCABA - SP (BR). REGGIO, Alfredo, Mala [BR/BR]; Rua das Grumixamas, 308 apto 41, Pq Jabaquara, 04349-0000 SÃO PAULO - SP (BR). VESAMÄKI, Kimmo, Kalevi [FI/FI]; Tavelantie 20, FIN-36200 KANGASALA (FI). POTILA, Juha, Tapio [FI/FI]; Elinantie 29, FIN-33950 PIRKKALA (FI).

SATOLA, Esa, Pekka [FI/FI]; Pohjankulma 1 A 15, FIN-33500 Tampere (FI).

- (74) Agent: OY JALO ANT-WUORINEN AB; Iso Roobertinkatu 4-6 A, FIN-00120 HELSINKI (FI).
- (81) Designated States (national): AE, AG, AL, AM, AT (utility model), AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ (utility model), CZ, DE (utility model), DE, DK (utility model), DK, DM, DZ, EC, EE (utility model), EE, ES, FI (utility model), FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK (utility model), SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD AND APPARATUS FOR MEASURING AND ADJUSTING THE SETTING OF A CRUSHER

(57) Abstract: A method and apparatus are disclosed for measuring and monitoring the setting of a crusher, in which method the erosion of the wearing parts of the crusher are monitored by sensors capable of transmitting the measurement data to the crusher's automatic control system. Based on the received measurement data, the control system adjusts the crusher setting so as to maintain the setting at its predetermined value irrespective of the erosion of the crusher's wearing parts. The invention also relates to alternative embodiments of wear sensors for the wearing parts of a crusher. The measurement data indicating the amount of erosion in the wearing parts is transmitted wirelessly to the exterior side of the crusher.